

ABSTRACT

5 The present invention is drawn to the use of
attenuated coxsackievirus cardiotropic virus vectors as
efficient gene transfer vectors to deliver immunomodulatory
or other biologically active proteins and/or antigenic
epitopes in transient infections to aid in preventing,
10 ameliorating, and/or ablating infectious viral heart disease
and reducing, or ablating entirely, heart transplant
rejection. Specifically disclosed are univalent and
multivalent vaccines for certain viruses, including
adenovirus and coxsackieviruses. Also disclosed are
15 compositions and methods for suppressing onset of type 1
diabetes, using vectors of the invention that express
immunomodulatory proteins, specifically IL-4.